



Bureau of Safety and Environmental Enforcement

BSEE Priorities Regarding SEMS – Offshore Technology Conference 2015

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“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”

Agenda

- Background – Safety & Environ. Mgt. System (SEMS) development history
- First audit cycle observations and preparation for second audit cycle
- Continuous improvement possibilities
 - API
 - COS
 - BSEE

Development of SEMS

- Triggers
 - Process Safety Incidents
 - Development of safety management systems
- Initially a voluntary standard
 - API Recommended Practice for a Safety and Environmental Management Program (RP75)
 - 1991 First Edition
 - 2004 Third Edition (reaffirmed 2008)

Development of SEMS

- Eventually adapted as Regulation
 - 2009 Notice of Proposed Rulemaking (NPRM) from MMS (predecessor to BSEE)
 - 2010 April
 - *Deepwater Horizon* tragedy
 - U.S. President directs DOI to recommend safety improvements
 - 2010 May: DOI recommends management system mandate
 - 2010 October: DOI publishes SEMS I regulation
 - Adopts RP 75 framework

SEMS Continuous Improvement

- 2011: SEMS II NPRM issued
- 2013: SEMS II Final Rule issued
- 2015 (June): Compliance with SEMS II required

Observations from 1st Audit Cycle (concluded in 2014)

- Findings confirm that OCS operators have implemented a SEMS – Compliance rate of 96%.
 - 90 → 80 OCS operators subject to Subpart S (consolidation is reducing the number of operators)
 - 447 offshore facilities visited during first audit cycle (17-18% of all production platforms and rigs in well ops)
- Significant variability in:
 - Understanding of management systems
 - System maturity
 - Audit report format

Variance by Operators

- Operators with an existing, internal SEMS mapped their mgt. system elements to CFR requirements
 - SEMS gave them an opportunity to evaluate internal programs and processes against a government definition of what elements should be included in a robust management system
- Operators without existing SEMS had to develop and then implement a formal program
 - Focus appeared to be on fulfilling the requirements of Subpart S by creating a documented management system, but it is unclear if further steps were taken to ensure the tool is effectively managing safety and environmental risks

Trends in Performance

- *Emergency Response* and *Auditing* were identified as best understood, documented, communicated, and implemented SEMS elements
- There appeared to be a strong focus on historically established SEMS elements, e.g., *Training* and *Safe Work Practices*

Gaps in Development and Implementation

- *Hazard Analysis and Management of Change* were not being consistently implemented as tools to manage risks
- *Pre-startup Review* observations showed lack of implementation of procedures
- Relationship between SEMS elements did not appear to always be understood (e.g., Hazard Analysis should feed Pre-startup Review)
- SEMS elements were documented but triggers for implementation were inconsistent (e.g., Management of Change)

Audit Process Observations

- Wide variation in audit report format, content, and methodology
- Audit protocols often focused on assessing compliance, not risk management
- Many of the initial audit protocols did not guide auditors to evaluate levels of *documentation, implementation, AND effectiveness*

BSEE's Plans for Strengthening SEMS Approaches in Industry

- Emphasize that “compliance” requires operators to demonstrate that they are implementing Subpart S as a performance-based standard
- Good faith efforts to use the management system to improve offshore safety and environmental protection will be applauded
- Work with API and the offshore industry to redraft and refocus RP75
- Emphasize expectations by a management system on risk control, leadership, performance measurements, and consideration of human factors

BSEE's Plans for Moving Ahead – with SEMS Auditors

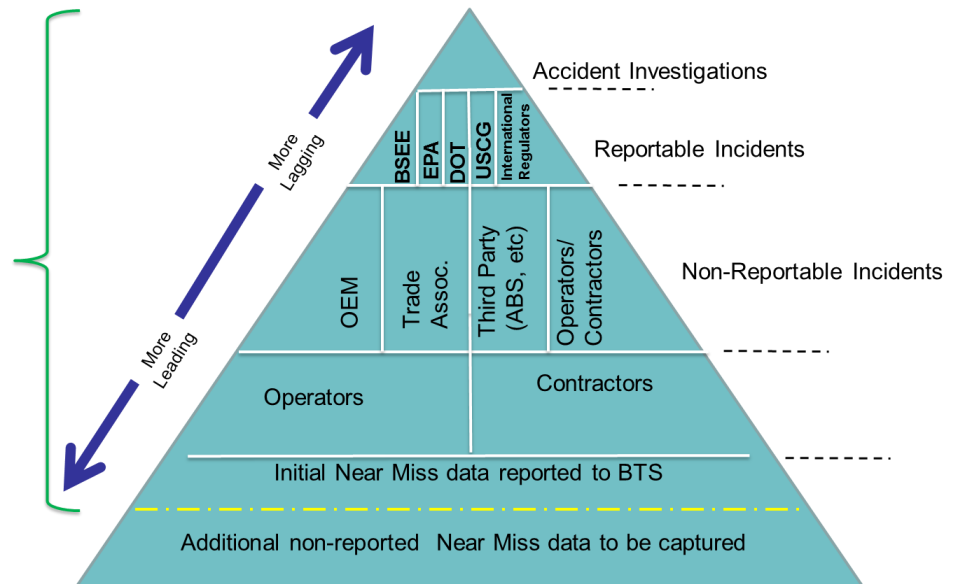
- Agreements with Accreditation Bodies such that Audit Service Providers add more value to the industry
- Improved support / guidance for the auditing community
- Better reporting (will an ISO 17022 report format provide more value to the operators from the SEMS audits?)
- Measure management system maturity and modify audit approach based on it
- Re-focus the second cycle SEMS audits as a test of the effectiveness and integration of each SEMS element

Other BSEE Initiatives on Management System Effectiveness

- Examine how to improve the interface and safety controls between operators, contractors and subcontractors
- Examine and implement measures to improve data exchanges on safety challenges and resolutions

For example, Safe OCS is now active

Sources of Offshore Safety Data



Other BSEE Initiatives on Management System Effectiveness

- Investigate the successes and challenges for various risk control methodologies (e.g. ALARP, 3rd party review, when is it justified to replace older strategies with newer methods, etc.)
- Analysis of the statistical basis for the current 15% sampling frequency during triennial SEMS audits
- Outline critical human factor considerations, determine how to measure safety culture, and determine how to use these results within the context of SEMS
- Identify other ISO, ANSI, API and other international standards that may be useful to adopt within a SEMS context

Initiatives Within BSEE

- Many SEMS day-to-day responsibilities assigned to regional staff
 - HQ and Regional Coordinators as stronger partners
 - Development of standard approaches and criteria to review and accept SEMS submittals
 - Enhanced inspections at district level – with frequency tied to risk profiles
- Improved communication with regulated community
 - FAQ page on the www.BSEE.gov website
- Promote internally and externally performance-based approaches to regulatory compliance (vs. prescriptive requirements) and the role of Performance Indicators in determining their successes

BSEE Website: www.bsee.gov



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